

COCT# 146

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132
20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

(425) 420-9200 FAX 420-9210
(509) 924-9200 FAX 924-9290
(503) 906-9200 FAX 906-9210
(541) 383-9310 FAX 382-7588

CHAIN OF CUSTODY REPORT

Work Order #: **P160209**

CLIENT: **BRISTOL**
REPORT TO: **ANNE KRANAWETTER**
ADDRESS: **AMCHITKA ISLAND, AK**
PHONE: **907-770-0974** FAX: **770-0975**

INVOICE TO:
BRISTOL

P.O. NUMBER: **21090**

TURNAROUND REQUEST in Business Days*

Organic & Inorganic Analyses
10 7 5 4 3 2 1 <1

STD. Petroleum Hydrocarbon Analyses
5 4 3 2 1 <1

STD. Please Specify

OTHER

*Turnaround Requests less than standard may incur Rush Charges.

PROJECT NAME: **AMCHITKA**
PROJECT NUMBER: **21090**
SAMPLED BY: **AK/CEM**

REQUESTED ANALYSES

CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	DO/RO	PAH/PCB	Metals	Geo/STX	VOC												MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID
1. 01 AMB6U03SL	7/3/01 1555	✓	✓	✓														S	3		
2. 01 AMB6U04SL	7/3/01 1600	✓	✓	✓														S	3		
3. 9 AMB6U05SL	7/3/01 1605	✓	✓	✓														S	3		
4. 01 AMB6U06SL	7/3/01 1610	✓	✓	✓														S	3		
5. 01 AMB6U07SL	7/3/01	✓	✓	✓														S	3		
6. 01 AMB6U08SL	7/3/01	✓	✓	✓														S	3		
7.																					
8.																					
9.																					
10.																					
11.																					
12.																					
13.																					
14.																					
15.																					

RELINQUISHED BY: **Anne Kranawetter**
PRINT NAME: **Anne Kranawetter** FIRM: **BRISTOL**

DATE: **7.3.01**
TIME: **1736**

RECEIVED BY: **M. Farooq**
PRINT NAME: **MUSTAHSAN R. FAROOQ** FIRM: **NCA**

DATE: **7/3/01**
TIME: **1745**

RELINQUISHED BY: **M. Farooq**
PRINT NAME: **MUSTAHSAN** FIRM: **NCA**

DATE: **7/6/01**
TIME: **1838**

RECEIVED BY: **Rachel Arrin**
PRINT NAME: **Rachel Arrin** FIRM: **NCA**

DATE: **7/6/01**
TIME: **1838**

ADDITIONAL REMARKS: **Regulated underground storage tank B-6**

TEMP: **4.8**

PAGE OF



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
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Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588

1 December, 2001

Anne Krarawetter
Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 07/06/01 18:38. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jerry Orlando
Project Manager/QA

Work Orders included in this report:

P1G0209

Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter


Reported:
07/31/01 12:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMB6U03SL	P1G0209-01	Soil	07/03/01 15:55	07/06/01 18:38
01AMB6U04SL	P1G0209-02	Soil	07/03/01 16:00	07/06/01 18:38
01AMB6U05SL	P1G0209-03	Soil	07/03/01 16:05	07/06/01 18:38
01AMB6U06SL	P1G0209-04	Soil	07/03/01 16:10	07/06/01 18:38

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.


Jerry Orlando, Project Manager/QA

North Creek Analytical, Inc.
Environmental Laboratory Network

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Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter


Reported:
 07/31/01 12:36

Gasoline Range Organics (n-Hexane to <n-Decane) and BTEX per AK101 and EPA 8021B
North Creek Analytical - Portland

North Creek Analytical - Portland									
Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U03SL (P1G0209-01) Soil					Sampled: 07/03/01 Received: 07/06/01				
Gasoline Range Organics	ND	4.00	mg/kg dry	1	AK101/8021B	07/10/01	07/10/01	1071099	
Benzene	ND	0.100	"	"	"	"	"	"	
Toluene	ND	0.100	"	"	"	"	"	"	
Ethylbenzene	ND	0.100	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	"	"	"	"	"	
Surr: a,a,a-TFT (FID)	116 %	60-140							
Surr: a,a,a-TFT (PID)	100 %	60-140							
01AMB6U04SL (P1G0209-02) Soil					Sampled: 07/03/01 Received: 07/06/01				
Gasoline Range Organics	4.20	3.39	mg/kg dry	1	AK101/8021B	07/10/01	07/10/01	1071099	
Benzene	ND	0.0847	"	"	"	"	"	"	
Toluene	ND	0.0847	"	"	"	"	"	"	
Ethylbenzene	ND	0.0847	"	"	"	"	"	"	
Xylenes (total)	ND	0.0847	"	"	"	"	"	"	
Surr: a,a,a-TFT (FID)	116 %	60-140							
Surr: a,a,a-TFT (PID)	99.2 %	60-140							
01AMB6U05SL (P1G0209-03) Soil					Sampled: 07/03/01 Received: 07/06/01				
Gasoline Range Organics	4.06	4.00	mg/kg dry	1	AK101/8021B	07/10/01	07/10/01	1071099	
Benzene	ND	0.100	"	"	"	"	"	"	
Toluene	0.249	0.100	"	"	"	"	"	"	
Ethylbenzene	ND	0.100	"	"	"	"	"	"	
Xylenes (total)	0.212	0.100	"	"	"	"	"	"	
Surr: a,a,a-TFT (FID)	115 %	60-140							
Surr: a,a,a-TFT (PID)	98.2 %	60-140							

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541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter

Reported:
07/31/01 12:36

Gasoline Range Organics (n-Hexane to <n-Decane) and BTEX per AK101 and EPA 8021B
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U06SL (P1G0209-04) Soil						Sampled: 07/03/01 Received: 07/06/01			
Gasoline Range Organics	ND	2.25	mg/kg dry	1	AK101/8021B	07/10/01	07/10/01	1071099	
Benzene	ND	0.0563	"	"	"	"	"	"	
Toluene	ND	0.0563	"	"	"	"	"	"	
Ethylbenzene	ND	0.0563	"	"	"	"	"	"	
Xylenes (total)	ND	0.0563	"	"	"	"	"	"	
Surr: a,a,a-TFT (FID)	110 %	60-140							
Surr: a,a,a-TFT (PID)	93.5 %	60-140							

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Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter

Reported:
07/31/01 12:36

Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/103
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U03SL (P1G0209-01) Soil						Sampled: 07/03/01 Received: 07/06/01			
Diesel Range Organics	107	25.0	mg/kg dry	1	AK102/103	07/12/01	07/16/01	1071212	
Residual Range Organics	ND	50.0	"	"	"	"	"	"	
<i>Surr: 1-Chlorooctadecane</i>	84.1 %	75-125							
<i>Surr: Triacontane</i>	124 %	50-150							
01AMB6U04SL (P1G0209-02) Soil						Sampled: 07/03/01 Received: 07/06/01			
Diesel Range Organics	40.2	25.0	mg/kg dry	1	AK102/103	07/12/01	07/16/01	1071212	
Residual Range Organics	ND	50.0	"	"	"	"	"	"	
<i>Surr: 1-Chlorooctadecane</i>	80.4 %	75-125							
<i>Surr: Triacontane</i>	123 %	50-150							
01AMB6U05SL (P1G0209-03) Soil						Sampled: 07/03/01 Received: 07/06/01			
Diesel Range Organics	63.6	25.0	mg/kg dry	1	AK102/103	07/12/01	07/16/01	1071212	
Residual Range Organics	ND	50.0	"	"	"	"	"	"	
<i>Surr: 1-Chlorooctadecane</i>	84.3 %	75-125							
<i>Surr: Triacontane</i>	121 %	50-150							
01AMB6U06SL (P1G0209-04) Soil						Sampled: 07/03/01 Received: 07/06/01			
Diesel Range Organics	880	25.0	mg/kg dry	1	AK102/103	07/12/01	07/16/01	1071212	
Residual Range Organics	54.8	50.0	"	"	"	"	"	"	D-11
<i>Surr: 1-Chlorooctadecane</i>	94.4 %	75-125							
<i>Surr: Triacontane</i>	122 %	50-150							

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Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter


Reported:
 07/31/01 12:36

Total Metals per EPA 6000/7000 Series Methods
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U03SL (P1G0209-01) Soil						Sampled: 07/03/01 Received: 07/06/01			
Arsenic	1.93	0.500	mg/kg dry	1	EPA 6020	07/20/01	07/21/01	1071499	
Barium	136	1.00	"	10	"	"	"	"	
Cadmium	ND	0.500	"	"	"	"	"	"	
Chromium	6.06	0.500	"	"	"	"	"	"	
Lead	7.93	0.500	"	"	"	"	"	"	
Nickel	11.5	1.00	"	"	"	"	07/21/01	"	
Vanadium	178	2.50	"	1	"	"	07/21/01	"	
01AMB6U04SL (P1G0209-02) Soil						Sampled: 07/03/01 Received: 07/06/01			
Arsenic	4.09	0.500	mg/kg dry	1	EPA 6020	07/20/01	07/21/01	1071499	
Barium	49.9	1.00	"	10	"	"	07/21/01	"	
Cadmium	ND	0.500	"	"	"	"	07/21/01	"	
Chromium	5.77	0.500	"	"	"	"	"	"	
Lead	38.8	0.500	"	"	"	"	"	"	
Nickel	15.8	1.00	"	"	"	"	07/21/01	"	
Vanadium	109	2.50	"	1	"	"	"	"	
01AMB6U05SL (P1G0209-03) Soil						Sampled: 07/03/01 Received: 07/06/01			
Arsenic	2.25	0.500	mg/kg dry	1	EPA 6020	07/20/01	07/21/01	1071499	
Barium	77.0	1.00	"	10	"	"	07/21/01	"	
Cadmium	ND	0.500	"	"	"	"	07/21/01	"	
Chromium	5.63	0.500	"	"	"	"	"	"	
Lead	6.43	0.500	"	"	"	"	"	"	
Nickel	10.6	1.00	"	"	"	"	07/21/01	"	
Vanadium	178	2.50	"	1	"	"	"	"	

North Creek Analytical - Portland

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 Jerry Orlando, Project Manager/QA

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Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
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Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter


Reported:
07/31/01 12:36

Total Metals per EPA 6000/7000 Series Methods
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U06SL (P1G0209-04) Soil						Sampled: 07/03/01 Received: 07/06/01			
Arsenic	1.50	0.500	mg/kg dry	1	EPA 6020	07/20/01	07/21/01	1071499	
Barium	81.8	1.00	"	10	"	"	07/21/01	"	
Cadmium	ND	0.500	"	"	"	"	07/21/01	"	
Chromium	6.95	0.500	"	"	"	"	"	"	
Lead	4.67	0.500	"	"	"	"	"	"	
Nickel	10.4	1.00	"	"	"	"	07/21/01	"	
Vanadium	176	2.50	"	1	"	"	"	"	

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Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter

Reported:
 07/31/01 12:36

Polychlorinated Biphenyls per EPA Method 8082
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U03SL (P1G0209-01) Soil									
						Sampled: 07/03/01 Received: 07/06/01			
Aroclor 1016	ND	67.0	ug/kg dry	1	EPA 8082	07/14/01	07/18/01	1071259	
Aroclor 1221	ND	134	"	"	"	"	"	"	
Aroclor 1232	ND	67.0	"	"	"	"	"	"	
Aroclor 1242	ND	67.0	"	"	"	"	"	"	
Aroclor 1248	ND	67.0	"	"	"	"	"	"	
Aroclor 1254	ND	67.0	"	"	"	"	"	"	
Aroclor 1260	ND	67.0	"	"	"	"	"	"	
<i>Surr: 2,4,5,6-Tetrachloro-m-xylene</i>	80.2 %	63-119							
<i>Surr: Decachlorobiphenyl</i>	102 %	52-131							
01AMB6U04SL (P1G0209-02) Soil									
						Sampled: 07/03/01 Received: 07/06/01			
Aroclor 1016	ND	67.0	ug/kg dry	1	EPA 8082	07/14/01	07/18/01	1071259	
Aroclor 1221	ND	134	"	"	"	"	"	"	
Aroclor 1232	ND	67.0	"	"	"	"	"	"	
Aroclor 1242	ND	67.0	"	"	"	"	"	"	
Aroclor 1248	ND	67.0	"	"	"	"	"	"	
Aroclor 1254	ND	67.0	"	"	"	"	"	"	
Aroclor 1260	ND	67.0	"	"	"	"	"	"	
<i>Surr: 2,4,5,6-Tetrachloro-m-xylene</i>	76.0 %	63-119							
<i>Surr: Decachlorobiphenyl</i>	97.4 %	52-131							
01AMB6U05SL (P1G0209-03) Soil									
						Sampled: 07/03/01 Received: 07/06/01			
Aroclor 1016	ND	67.0	ug/kg dry	1	EPA 8082	07/14/01	07/18/01	1071259	
Aroclor 1221	ND	134	"	"	"	"	"	"	
Aroclor 1232	ND	67.0	"	"	"	"	"	"	
Aroclor 1242	ND	67.0	"	"	"	"	"	"	
Aroclor 1248	ND	67.0	"	"	"	"	"	"	
Aroclor 1254	ND	67.0	"	"	"	"	"	"	
Aroclor 1260	ND	67.0	"	"	"	"	"	"	
<i>Surr: 2,4,5,6-Tetrachloro-m-xylene</i>	71.1 %	63-119							
<i>Surr: Decachlorobiphenyl</i>	103 %	52-131							

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 Project Manager: Anne Krarawetter


Reported:
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Polychlorinated Biphenyls per EPA Method 8082
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U06SL (P1G0209-04) Soil						Sampled: 07/03/01 Received: 07/06/01			
Aroclor 1016	ND	67.0	ug/kg dry	1	EPA 8082	07/14/01	07/19/01	1071259	
Aroclor 1221	ND	134	"	"	"	"	"	"	
Aroclor 1232	ND	67.0	"	"	"	"	"	"	
Aroclor 1242	ND	67.0	"	"	"	"	"	"	
Aroclor 1248	ND	67.0	"	"	"	"	"	"	
Aroclor 1254	ND	67.0	"	"	"	"	"	"	
Aroclor 1260	ND	67.0	"	"	"	"	"	"	
Surr: 2,4,5,6-Tetrachloro-m-xylene	59.3 %	63-119							S-07
Surr: Decachlorobiphenyl	91.4 %	52-131							

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Project: Amchitka
Project Number: 210901, PO# 21090
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Reported:
07/31/01 12:36


Volatile Organic Compounds per EPA Method 8260B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U03SL (P1G0209-01) Soil						Sampled: 07/03/01 Received: 07/06/01			
Acetone	ND	2500	ug/kg dry	1	EPA 8260B	07/16/01	07/17/01	1071301	
Benzene	ND	100	"	"	"	"	"	"	
Bromobenzene	ND	100	"	"	"	"	"	"	
Bromochloromethane	ND	100	"	"	"	"	"	"	
Bromodichloromethane	ND	100	"	"	"	"	"	"	
Bromoform	ND	100	"	"	"	"	"	"	
Bromomethane	ND	500	"	"	"	"	"	"	
2-Butanone	ND	1000	"	"	"	"	"	"	
n-Butylbenzene	ND	500	"	"	"	"	"	"	
sec-Butylbenzene	ND	100	"	"	"	"	"	"	
tert-Butylbenzene	ND	100	"	"	"	"	"	"	
Carbon disulfide	ND	1000	"	"	"	"	"	"	
Carbon tetrachloride	ND	100	"	"	"	"	"	"	
Chlorobenzene	ND	100	"	"	"	"	"	"	
Chloroethane	ND	100	"	"	"	"	"	"	
Chloroform	ND	100	"	"	"	"	"	"	
Chloromethane	ND	500	"	"	"	"	"	"	
2-Chlorotoluene	ND	100	"	"	"	"	"	"	
4-Chlorotoluene	ND	100	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	500	"	"	"	"	"	"	
Dibromochloromethane	ND	100	"	"	"	"	"	"	
1,2-Dibromoethane	ND	100	"	"	"	"	"	"	
Dibromomethane	ND	100	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	100	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	100	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	100	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	500	"	"	"	"	"	"	
1,1-Dichloroethane	ND	100	"	"	"	"	"	"	
1,2-Dichloroethane	ND	100	"	"	"	"	"	"	
1,1-Dichloroethene	ND	100	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	100	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	100	"	"	"	"	"	"	
1,2-Dichloropropane	ND	100	"	"	"	"	"	"	
1,3-Dichloropropane	ND	100	"	"	"	"	"	"	
2,2-Dichloropropane	ND	100	"	"	"	"	"	"	
1,1-Dichloropropene	ND	100	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	100	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	100	"	"	"	"	"	"	
Ethylbenzene	ND	100	"	"	"	"	"	"	

North Creek Analytical - Portland

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North Creek Analytical, Inc.
Environmental Laboratory Network

Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter


Reported:
 07/31/01 12:36

Volatile Organic Compounds per EPA Method 8260B
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U03SL (P1G0209-01) Soil						Sampled: 07/03/01 Received: 07/06/01			
Hexachlorobutadiene	ND	200	ug/kg dry	1	EPA 8260B	07/16/01	07/17/01	1071301	
2-Hexanone	ND	1000	"	"	"	"	"	"	
Isopropylbenzene	ND	200	"	"	"	"	"	"	
p-Isopropyltoluene	ND	200	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	100	"	"	"	"	"	"	
Methylene chloride	ND	500	"	"	"	"	"	"	
Naphthalene	ND	200	"	"	"	"	"	"	
n-Propylbenzene	ND	100	"	"	"	"	"	"	
Styrene	ND	100	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	100	"	"	"	"	"	"	
Tetrachloroethene	ND	100	"	"	"	"	"	"	
Toluene	ND	100	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	100	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	100	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	100	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	100	"	"	"	"	"	"	
Trichloroethene	ND	100	"	"	"	"	"	"	
Trichlorofluoromethane	ND	100	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	100	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	100	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	100	"	"	"	"	"	"	
Vinyl chloride	ND	100	"	"	"	"	"	"	
o-Xylene	ND	100	"	"	"	"	"	"	
m,p-Xylene	ND	200	"	"	"	"	"	"	
Surr: 4-BFB	100 %	70-130							
Surr: 1,2-DCA-d4	81.1 %	70-130							
Surr: Dibromofluoromethane	84.2 %	70-130							
Surr: Toluene-d8	96.4 %	70-130							

North Creek Analytical - Portland

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 Jerry Orlando, Project Manager/QA

North Creek Analytical, Inc.
Environmental Laboratory Network

10 of 34

Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter

Reported:
 07/31/01 12:36

Volatile Organic Compounds per EPA Method 8260B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U04SL (P1G0209-02) Soil						Sampled: 07/03/01 Received: 07/06/01			
Acetone	ND	2110	ug/kg dry	1	EPA 8260B	07/16/01	07/17/01	1071301	
Benzene	ND	84.3	"	"	"	"	"	"	
Bromobenzene	ND	84.3	"	"	"	"	"	"	
Bromochloromethane	ND	84.3	"	"	"	"	"	"	
Bromodichloromethane	ND	84.3	"	"	"	"	"	"	
Bromoform	ND	84.3	"	"	"	"	"	"	
Bromomethane	ND	421	"	"	"	"	"	"	
2-Butanone	ND	84.3	"	"	"	"	"	"	
n-Butylbenzene	ND	421	"	"	"	"	"	"	
sec-Butylbenzene	ND	84.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	84.3	"	"	"	"	"	"	
Carbon disulfide	ND	84.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	84.3	"	"	"	"	"	"	
Chlorobenzene	ND	84.3	"	"	"	"	"	"	
Chloroethane	ND	84.3	"	"	"	"	"	"	
Chloroform	ND	84.3	"	"	"	"	"	"	
Chloromethane	ND	421	"	"	"	"	"	"	
2-Chlorotoluene	ND	84.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	84.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	421	"	"	"	"	"	"	
Dibromochloromethane	ND	84.3	"	"	"	"	"	"	
1,2-Dibromoethane	ND	84.3	"	"	"	"	"	"	
Dibromomethane	ND	84.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	84.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	84.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	84.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	421	"	"	"	"	"	"	
1,1-Dichloroethane	ND	84.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	84.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	84.3	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	84.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	84.3	"	"	"	"	"	"	
1,2-Dichloropropane	ND	84.3	"	"	"	"	"	"	
1,3-Dichloropropane	ND	84.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	84.3	"	"	"	"	"	"	
1,1-Dichloropropene	ND	84.3	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	84.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	84.3	"	"	"	"	"	"	
Ethylbenzene	ND	84.3	"	"	"	"	"	"	

North Creek Analytical - Portland

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Jerry Orlando, Project Manager/QA

North Creek Analytical, Inc.
 Environmental Laboratory Network

11 of 34

Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter

Reported:
07/31/01 12:36

Volatile Organic Compounds per EPA Method 8260B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U04SL (P1G0209-02) Soil						Sampled: 07/03/01 Received: 07/06/01			
Hexachlorobutadiene	ND	169	ug/kg dry	1	EPA 8260B	07/16/01	07/17/01	1071301	
2-Hexanone	ND	843	"	"	"	"	"	"	
Isopropylbenzene	ND	169	"	"	"	"	"	"	
p-Isopropyltoluene	ND	169	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	421	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	84.3	"	"	"	"	"	"	
Methylene chloride	ND	421	"	"	"	"	"	"	
Naphthalene	ND	169	"	"	"	"	"	"	
n-Propylbenzene	ND	84.3	"	"	"	"	"	"	
Styrene	ND	84.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	84.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	84.3	"	"	"	"	"	"	
Tetrachloroethene	ND	84.3	"	"	"	"	"	"	
Toluene	ND	84.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	84.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	84.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	84.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	84.3	"	"	"	"	"	"	
Trichloroethene	ND	84.3	"	"	"	"	"	"	
Trichlorofluoromethane	ND	84.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	84.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	84.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	84.3	"	"	"	"	"	"	
Vinyl chloride	ND	84.3	"	"	"	"	"	"	
o-Xylene	ND	84.3	"	"	"	"	"	"	
m,p-Xylene	ND	169	"	"	"	"	"	"	
Surr: 4-BFB	100 %	70-130							
Surr: 1,2-DCA-d4	79.9 %	70-130							
Surr: Dibromofluoromethane	84.5 %	70-130							
Surr: Toluene-d8	96.4 %	70-130							

North Creek Analytical - Portland

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Jerry Orlando, Project Manager/QA

North Creek Analytical, Inc.
Environmental Laboratory Network

12 of 34

Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter


Reported:
07/31/01 12:36

Volatile Organic Compounds per EPA Method 8260B
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U05SL (PIG0209-03) Soil						Sampled: 07/03/01 Received: 07/06/01			
Acetone	ND	2500	ug/kg dry	1	EPA 8260B	07/16/01	07/17/01	1071301	
Benzene	ND	100	"	"	"	"	"	"	
Bromobenzene	ND	100	"	"	"	"	"	"	
Bromochloromethane	ND	100	"	"	"	"	"	"	
Bromodichloromethane	ND	100	"	"	"	"	"	"	
Bromoform	ND	100	"	"	"	"	"	"	
Bromomethane	ND	500	"	"	"	"	"	"	
2-Butanone	ND	1000	"	"	"	"	"	"	
n-Butylbenzene	ND	500	"	"	"	"	"	"	
sec-Butylbenzene	ND	100	"	"	"	"	"	"	
tert-Butylbenzene	ND	100	"	"	"	"	"	"	
Carbon disulfide	ND	1000	"	"	"	"	"	"	
Carbon tetrachloride	ND	100	"	"	"	"	"	"	
Chlorobenzene	ND	100	"	"	"	"	"	"	
Chloroethane	ND	100	"	"	"	"	"	"	
Chloroform	ND	100	"	"	"	"	"	"	
Chloromethane	ND	500	"	"	"	"	"	"	
2-Chlorotoluene	ND	100	"	"	"	"	"	"	
4-Chlorotoluene	ND	100	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	500	"	"	"	"	"	"	
Dibromochloromethane	ND	100	"	"	"	"	"	"	
1,2-Dibromoethane	ND	100	"	"	"	"	"	"	
Dibromomethane	ND	100	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	100	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	100	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	100	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	500	"	"	"	"	"	"	
1,1-Dichloroethane	ND	100	"	"	"	"	"	"	
1,2-Dichloroethane	ND	100	"	"	"	"	"	"	
1,1-Dichloroethene	ND	100	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	100	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	100	"	"	"	"	"	"	
1,2-Dichloropropane	ND	100	"	"	"	"	"	"	
1,3-Dichloropropane	ND	100	"	"	"	"	"	"	
2,2-Dichloropropane	ND	100	"	"	"	"	"	"	
1,1-Dichloropropene	ND	100	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	100	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	100	"	"	"	"	"	"	
Ethylbenzene	ND	100	"	"	"	"	"	"	

North Creek Analytical - Portland

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North Creek Analytical, Inc.
Environmental Laboratory Network

13 of 34

Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter

Reported:
 07/31/01 12:36

Volatile Organic Compounds per EPA Method 8260B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U05SL (P1G0209-03) Soil						Sampled: 07/03/01 Received: 07/06/01			
Hexachlorobutadiene	ND	200	ug/kg dry	1	EPA 8260B	07/16/01	07/17/01	1071301	
2-Hexanone	ND	1000	"	"	"	"	"	"	
Isopropylbenzene	ND	200	"	"	"	"	"	"	
p-Isopropyltoluene	ND	200	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	100	"	"	"	"	"	"	
Methylene chloride	ND	500	"	"	"	"	"	"	
Naphthalene	ND	200	"	"	"	"	"	"	
n-Propylbenzene	ND	100	"	"	"	"	"	"	
Styrene	200	100	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	100	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	100	"	"	"	"	"	"	
Tetrachloroethene	ND	100	"	"	"	"	"	"	
Toluene	371	100	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	100	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	100	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	100	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	100	"	"	"	"	"	"	
Trichloroethene	ND	100	"	"	"	"	"	"	
Trichlorofluoromethane	ND	100	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	100	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	100	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	100	"	"	"	"	"	"	
Vinyl chloride	ND	100	"	"	"	"	"	"	
o-Xylene	ND	100	"	"	"	"	"	"	
m,p-Xylene	ND	200	"	"	"	"	"	"	
Surr: 4-BFB	98.2 %	70-130							
Surr: 1,2-DCA-d4	80.7 %	70-130							
Surr: Dibromofluoromethane	85.2 %	70-130							
Surr: Toluene-d8	97.8 %	70-130							

North Creek Analytical - Portland

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North Creek Analytical, Inc.
 Environmental Laboratory Network

14 of 34

Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter

Reported:
07/31/01 12:36

Volatile Organic Compounds per EPA Method 8260B

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U06SL (P1G0209-04) Soil						Sampled: 07/03/01 Received: 07/06/01			
Acetone	ND	1410	ug/kg dry	1	EPA 8260B	07/16/01	07/17/01	1071301	
Benzene	ND	56.3	"	"	"	"	"	"	
Bromobenzene	ND	56.3	"	"	"	"	"	"	
Bromochloromethane	ND	56.3	"	"	"	"	"	"	
Bromodichloromethane	ND	56.3	"	"	"	"	"	"	
Bromoform	ND	56.3	"	"	"	"	"	"	
Bromomethane	ND	282	"	"	"	"	"	"	
2-Butanone	ND	56.3	"	"	"	"	"	"	
n-Butylbenzene	ND	282	"	"	"	"	"	"	
sec-Butylbenzene	ND	56.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	56.3	"	"	"	"	"	"	
Carbon disulfide	ND	56.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	56.3	"	"	"	"	"	"	
Chlorobenzene	ND	56.3	"	"	"	"	"	"	
Chloroethane	ND	56.3	"	"	"	"	"	"	
Chloroform	ND	56.3	"	"	"	"	"	"	
Chloromethane	ND	282	"	"	"	"	"	"	
2-Chlorotoluene	ND	56.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	56.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	282	"	"	"	"	"	"	
Dibromochloromethane	ND	56.3	"	"	"	"	"	"	
1,2-Dibromoethane	ND	56.3	"	"	"	"	"	"	
Dibromomethane	ND	56.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	56.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	56.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	56.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	282	"	"	"	"	"	"	
1,1-Dichloroethane	ND	56.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	56.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	56.3	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	56.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	56.3	"	"	"	"	"	"	
1,2-Dichloropropane	ND	56.3	"	"	"	"	"	"	
1,3-Dichloropropane	ND	56.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	56.3	"	"	"	"	"	"	
1,1-Dichloropropene	ND	56.3	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	56.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	56.3	"	"	"	"	"	"	
Ethylbenzene	ND	56.3	"	"	"	"	"	"	

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North Creek Analytical, Inc.
Environmental Laboratory Network

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Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter


Reported:
07/31/01 12:36

Volatile Organic Compounds per EPA Method 8260B
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U06SL (P1G0209-04) Soil						Sampled: 07/03/01 Received: 07/06/01			
Hexachlorobutadiene	ND	113	ug/kg dry	1	EPA 8260B	07/16/01	07/17/01	1071301	
2-Hexanone	ND	563	"	"	"	"	"	"	
Isopropylbenzene	ND	113	"	"	"	"	"	"	
p-Isopropyltoluene	ND	113	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	282	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	56.3	"	"	"	"	"	"	
Methylene chloride	ND	282	"	"	"	"	"	"	
Naphthalene	ND	113	"	"	"	"	"	"	
n-Propylbenzene	ND	56.3	"	"	"	"	"	"	
Styrene	ND	56.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	56.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	56.3	"	"	"	"	"	"	
Tetrachloroethene	ND	56.3	"	"	"	"	"	"	
Toluene	ND	56.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	56.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	56.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	56.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	56.3	"	"	"	"	"	"	
Trichloroethene	ND	56.3	"	"	"	"	"	"	
Trichlorofluoromethane	ND	56.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	56.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	56.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	56.3	"	"	"	"	"	"	
Vinyl chloride	ND	56.3	"	"	"	"	"	"	
o-Xylene	ND	56.3	"	"	"	"	"	"	
m,p-Xylene	ND	113	"	"	"	"	"	"	
Surr: 4-BFB	99.2 %	70-130							
Surr: 1,2-DCA-d4	81.4 %	70-130							
Surr: Dibromofluoromethane	84.4 %	70-130							
Surr: Toluene-d8	98.4 %	70-130							

North Creek Analytical - Portland

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North Creek Analytical, Inc.
Environmental Laboratory Network

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Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter

Reported:
07/31/01 12:36

Polynuclear Aromatic Compounds per EPA 8270M-SIM
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U03SL (P1G0209-01) Soil						Sampled: 07/03/01 Received: 07/06/01			
Acenaphthene	ND	13.4	ug/kg dry	1	EPA 8270m	07/17/01	07/19/01	1071349	
Acenaphthylene	ND	13.4	"	"	"	"	"	"	
Anthracene	ND	13.4	"	"	"	"	"	"	
Benzo (a) anthracene	ND	13.4	"	"	"	"	"	"	
Benzo (a) pyrene	ND	13.4	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	13.4	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	13.4	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	13.4	"	"	"	"	"	"	
Chrysene	ND	13.4	"	"	"	"	"	"	
Dibenzo (a,h) anthracene	ND	13.4	"	"	"	"	"	"	
Fluoranthene	18.2	13.4	"	"	"	"	"	"	
Fluorene	ND	13.4	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	13.4	"	"	"	"	"	"	
Naphthalene	ND	13.4	"	"	"	"	"	"	
Phenanthrene	ND	13.4	"	"	"	"	"	"	
Pyrene	17.7	13.4	"	"	"	"	"	"	
Surr: Fluorene-d10	73.5 %	40-150							
Surr: Pyrene-d10	118 %	40-150							
Surr: Benzo (a) pyrene-d12	86.0 %	40-150							

01AMB6U04SL (P1G0209-02) Soil

Sampled: 07/03/01 Received: 07/06/01

Acenaphthene	ND	13.4	ug/kg dry	1	EPA 8270m	07/17/01	07/20/01	1071349	
Acenaphthylene	ND	13.4	"	"	"	"	"	"	
Anthracene	ND	13.4	"	"	"	"	"	"	
Benzo (a) anthracene	ND	13.4	"	"	"	"	"	"	
Benzo (a) pyrene	ND	13.4	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	13.4	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	13.4	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	13.4	"	"	"	"	"	"	
Chrysene	ND	13.4	"	"	"	"	"	"	
Dibenzo (a,h) anthracene	ND	13.4	"	"	"	"	"	"	
Fluoranthene	19.8	13.4	"	"	"	"	"	"	
Fluorene	ND	13.4	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	13.4	"	"	"	"	"	"	
Naphthalene	ND	13.4	"	"	"	"	"	"	
Phenanthrene	ND	13.4	"	"	"	"	"	"	
Pyrene	20.8	13.4	"	"	"	"	"	"	
Surr: Fluorene-d10	78.6 %	40-150							

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North Creek Analytical, Inc.
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Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter

Reported:
 07/31/01 12:36

Polynuclear Aromatic Compounds per EPA 8270M-SIM

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
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01AMB6U04SL (P1G0209-02) Soil

Sampled: 07/03/01 Received: 07/06/01

Surr: Pyrene-d10	118 %	40-150
Surr: Benzo (a) pyrene-d12	89.2 %	40-150

01AMB6U05SL (P1G0209-03) Soil

Sampled: 07/03/01 Received: 07/06/01

Acenaphthene	ND	13.4	ug/kg dry	1	EPA 8270m	07/17/01	07/20/01	1071349	
Acenaphthylene	ND	13.4	"	"	"	"	"	"	
Anthracene	ND	13.4	"	"	"	"	"	"	
Benzo (a) anthracene	ND	13.4	"	"	"	"	"	"	
Benzo (a) pyrene	ND	13.4	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	13.4	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	13.4	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	13.4	"	"	"	"	"	"	
Chrysene	ND	13.4	"	"	"	"	"	"	
Dibenzo (a,h) anthracene	ND	13.4	"	"	"	"	"	"	
Fluoranthene	ND	13.4	"	"	"	"	"	"	
Fluorene	ND	13.4	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	13.4	"	"	"	"	"	"	
Naphthalene	ND	13.4	"	"	"	"	"	"	
Phenanthrene	ND	13.4	"	"	"	"	"	"	
Pyrene	ND	13.4	"	"	"	"	"	"	
Surr: Fluorene-d10	74.8 %	40-150							
Surr: Pyrene-d10	125 %	40-150							
Surr: Benzo (a) pyrene-d12	92.8 %	40-150							

01AMB6U06SL (P1G0209-04) Soil

Sampled: 07/03/01 Received: 07/06/01

Acenaphthene	ND	13.4	ug/kg dry	1	EPA 8270m	07/17/01	07/20/01	1071349	
Acenaphthylene	ND	13.4	"	"	"	"	"	"	
Anthracene	ND	13.4	"	"	"	"	"	"	
Benzo (a) anthracene	ND	13.4	"	"	"	"	"	"	
Benzo (a) pyrene	ND	13.4	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	13.4	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	13.4	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	13.4	"	"	"	"	"	"	
Chrysene	ND	13.4	"	"	"	"	"	"	
Dibenzo (a,h) anthracene	ND	13.4	"	"	"	"	"	"	
Fluoranthene	ND	13.4	"	"	"	"	"	"	
Fluorene	ND	13.4	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	13.4	"	"	"	"	"	"	

North Creek Analytical - Portland

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Jerry Orlando, ²⁰ Project Manager/QA

North Creek Analytical, Inc.
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Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter


Reported:
07/31/01 12:36

Polynuclear Aromatic Compounds per EPA 8270M-SIM
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U06SL (P1G0209-04) Soil						Sampled: 07/03/01 Received: 07/06/01			
Naphthalene	ND	13.4	ug/kg dry	1	EPA 8270m	07/17/01	07/20/01	1071349	
Phenanthrene	ND	13.4	"	"	"	"	"	"	
Pyrene	13.7	13.4	"	"	"	"	"	"	
Surr: Fluorene-d10	68.3 %	40-150							
Surr: Pyrene-d10	108 %	40-150							
Surr: Benzo (a) pyrene-d12	83.4 %	40-150							

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Environmental Laboratory Network

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Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter


Reported:
 07/31/01 12:36

Percent Dry Weight (Solids) per Standard Methods
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMB6U03SL (P1G0209-01) Soil						Sampled: 07/03/01 Received: 07/06/01			
% Solids	84.9	1.00 % by Weight		1	NCA SOP	07/11/01	07/12/01	1071131	
01AMB6U04SL (P1G0209-02) Soil						Sampled: 07/03/01 Received: 07/06/01			
% Solids	87.0	1.00 % by Weight		1	NCA SOP	07/11/01	07/12/01	1071131	
01AMB6U05SL (P1G0209-03) Soil						Sampled: 07/03/01 Received: 07/06/01			
% Solids	87.6	1.00 % by Weight		1	NCA SOP	07/11/01	07/12/01	1071131	
01AMB6U06SL (P1G0209-04) Soil						Sampled: 07/03/01 Received: 07/06/01			
% Solids	92.2	1.00 % by Weight		1	NCA SOP	07/11/01	07/12/01	1071131	

North Creek Analytical - Portland

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North Creek Analytical, Inc.
 Environmental Laboratory Network

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Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter

Reported:
 07/31/01 12:36

Gasoline Range Organics (n-Hexane to <n-Decane) and BTEX per AK101 and EPA 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1071099 - EPA 5035

Blank (1071099-BLK1)

Prepared & Analyzed: 07/10/01

Gasoline Range Organics	ND	4.00	mg/kg							
Benzene	ND	0.100	"							
Toluene	ND	0.100	"							
Ethylbenzene	ND	0.100	"							
Xylenes (total)	ND	0.100	"							
Surr: a,a,a-TFT (FID)	3.22		"	2.50		129	60-140			
Surr: a,a,a-TFT (PID)	2.43		"	2.50		97.2	60-140			

LCS (1071099-BS1)

Prepared & Analyzed: 07/10/01

Gasoline Range Organics	68.6	4.00	mg/kg	62.5		110	70-120			
Surr: a,a,a-TFT (FID)	3.41		"	2.50		136	60-140			

LCS (1071099-BS2)

Prepared & Analyzed: 07/10/01

Benzene	0.795	0.100	mg/kg	1.00		79.5	70-120			
Toluene	0.777	0.100	"	1.00		77.7	70-120			
Ethylbenzene	0.803	0.100	"	1.00		80.3	70-120			
Xylenes (total)	2.51	0.100	"	3.00		83.7	70-120			
Surr: a,a,a-TFT (PID)	2.47		"	2.50		98.8	60-140			

LCS Dup (1071099-BSD1)

Prepared & Analyzed: 07/10/01

Gasoline Range Organics	68.6	4.00	mg/kg	62.5		110	70-120	0.00	20	
Surr: a,a,a-TFT (FID)	3.46		"	2.50		138	60-140			


LCS Dup (1071099-BSD2)

Prepared & Analyzed: 07/10/01

Benzene	0.819	0.100	mg/kg	1.00		81.9	70-120	2.97	200	
Toluene	0.799	0.100	"	1.00		79.9	70-120	2.79	200	
Ethylbenzene	0.835	0.100	"	1.00		83.5	70-120	3.91	200	
Xylenes (total)	2.60	0.100	"	3.00		86.7	70-120	3.52	200	
Surr: a,a,a-TFT (PID)	2.51		"	2.50		100	60-140			

North Creek Analytical - Portland

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North Creek Analytical, Inc.
 Environmental Laboratory Network

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Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter

Reported:
07/31/01 12:36

Gasoline Range Organics (n-Hexane to <n-Decane) and BTEX per AK101 and EPA 8021B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1071099 - EPA 5035

Duplicate (1071099-DUP1)

Source: P1G0209-01

Prepared & Analyzed: 07/10/01

Gasoline Range Organics	ND	4.00	mg/kg dry		ND			8.22	50	
Surr: a,a,a-TFT (FID)	12.0		"	11.1		108	60-140			

Duplicate (1071099-DUP2)

Source: P1G0205-01

Prepared & Analyzed: 07/10/01

Gasoline Range Organics	ND	2.64	mg/kg dry		ND				50	
Surr: a,a,a-TFT (FID)	6.66		"	8.48		78.5	60-140			

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North Creek Analytical, Inc.
Environmental Laboratory Network

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Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
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Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter

Reported:
 07/31/01 12:36

Diesel Range Organics (C10-C25) and Residual Range Organics (C25-C36) per AK102/103 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1071212 - EPA 3550 Fuels										
Blank (1071212-BLK1)										
Diesel Range Organics	ND	25.0	mg/kg							
Residual Range Organics	ND	50.0	"							
Surr: 1-Chlorooctadecane	3.88		"	4.80		80.8	75-125			
Surr: Triacontane	6.77		"	6.25		108	50-150			
LCS (1071212-BS1)										
Diesel Range Organics	116	25.0	mg/kg	129		89.9	60-130			
Residual Range Organics	81.7	50.0	"	79.0		103	60-130			
Surr: 1-Chlorooctadecane	3.56		"	4.80		74.2	75-125			S-07
Surr: Triacontane	6.75		"	6.25		108	50-150			
LCS Dup (1071212-BSD1)										
Diesel Range Organics	112	25.0	mg/kg	129		86.8	60-130	3.51	20	
Residual Range Organics	78.6	50.0	"	79.0		99.5	60-130	3.87	20	
Surr: 1-Chlorooctadecane	3.59		"	4.80		74.8	75-125			S-07
Surr: Triacontane	6.57		"	6.25		105	50-150			
Duplicate (1071212-DUP1)										
	Source: P1G0208-01			Prepared: 07/12/01	Analyzed: 07/16/01					
Diesel Range Organics	92.2	25.0	mg/kg dry		158			52.6	50	Q-14
Residual Range Organics	ND	50.0	"		ND			0.00	50	
Surr: 1-Chlorooctadecane	4.78		"	5.36		89.2	75-125			
Surr: Triacontane	8.25		"	6.98		118	50-150			
Duplicate (1071212-DUP2)										
	Source: P1G0210-05			Prepared: 07/12/01	Analyzed: 07/16/01					
Diesel Range Organics	ND	25.0	mg/kg dry		ND				50	
Residual Range Organics	88.9	50.0	"		174			64.7	50	Q-14
Surr: 1-Chlorooctadecane	3.66		"	5.40		67.8	75-125			S-07
Surr: Triacontane	6.49		"	7.03		92.3	50-150			

North Creek Analytical - Portland

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Jerry Orlando, Project Manager/QA

North Creek Analytical, Inc.
 Environmental Laboratory Network

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Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter

Reported:
07/31/01 12:36

Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1071499 - EPA 3050

Blank (1071499-BLK1)

Prepared: 07/20/01 Analyzed: 07/21/01

Arsenic	ND	0.500	mg/kg
Barium	ND	1.00	"
Cadmium	ND	0.500	"
Chromium	ND	0.500	"
Lead	ND	0.500	"
Nickel	ND	1.00	"
Vanadium	ND	2.50	"

LCS (1071499-BS1)

Prepared: 07/20/01 Analyzed: 07/21/01

Arsenic	11.0	0.500	mg/kg	10.0	110	80-120
Barium	11.0	1.00	"	10.0	110	80-120
Cadmium	10.9	0.500	"	10.0	109	80-120
Chromium	11.7	0.500	"	10.0	117	80-120
Lead	10.7	0.500	"	10.0	107	80-120
Nickel	11.5	1.00	"	10.0	115	80-120
Vanadium	11.4	2.50	"	10.0	114	80-120

Duplicate (1071499-DUP1)

Source: P1G0209-01

Prepared: 07/20/01 Analyzed: 07/21/01

Arsenic	1.92	0.500	mg/kg dry	1.93	0.519	40
Barium	161	1.00	"	136	16.8	40
Cadmium	ND	0.500	"	ND		40
Chromium	6.41	0.500	"	6.06	5.61	40
Lead	7.45	0.500	"	7.93	6.24	40
Nickel	11.7	1.00	"	11.5	1.72	40
Vanadium	192	2.50	"	178	7.57	40

Matrix Spike (1071499-MS1)


Source: P1G0209-01

Prepared: 07/20/01 Analyzed: 07/21/01

Arsenic	15.4	0.500	mg/kg dry	11.8	1.93	114	75-125	
Barium	180	1.00	"	11.8	136	NR	75-125	Q-03
Cadmium	12.5	0.500	"	11.8	ND	106	75-125	
Chromium	23.2	0.500	"	11.8	6.06	145	75-125	Q-03
Lead	19.9	0.500	"	11.8	7.93	101	75-125	
Nickel	26.4	1.00	"	11.8	11.5	126	75-125	Q-02
Vanadium	214	2.50	"	11.8	178	NR	75-125	Q-03

North Creek Analytical - Portland

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Jerry Orlando, Project Manager/QA

North Creek Analytical, Inc.
Environmental Laboratory Network

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Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter

Reported:
 07/31/01 12:36

Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1071499 - EPA 3050

Matrix Spike (1071499-MS2)


Source: P1G0137-02

Prepared: 07/20/01 Analyzed: 07/21/01

Arsenic	14.1	0.500	mg/kg dry	12.0	1.97	101	75-125			
Barium	199	1.00	"	12.0	174	NR	75-125			
Cadmium	12.1	0.500	"	12.0	ND	101	75-125			Q-03
Chromium	30.8	0.500	"	12.0	18.3	104	75-125			
Lead	18.4	0.500	"	12.0	6.70	97.5	75-125			
Nickel	34.0	1.00	"	12.0	21.0	108	75-125			
Vanadium	147	2.50	"	12.0	137	83.3	75-125			

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 Environmental Laboratory Network

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Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter

Reported:
 07/31/01 12:36

Polychlorinated Biphenyls per EPA Method 8082 - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1071259 - EPA 3550

Blank (1071259-BLK1)

Prepared: 07/14/01 Analyzed: 07/18/01

Aroclor 1016	ND	67.0	ug/kg							
Aroclor 1221	ND	134	"							
Aroclor 1232	ND	67.0	"							
Aroclor 1242	ND	67.0	"							
Aroclor 1248	ND	67.0	"							
Aroclor 1254	ND	67.0	"							
Aroclor 1260	ND	67.0	"							
Surr: 2,4,5,6-Tetrachloro-m-xylene	31.7		"	33.3		95.2	63-119			
Surr: Decachlorobiphenyl	36.5		"	33.3		110	52-131			

LCS (1071259-BS1)

Prepared: 07/14/01 Analyzed: 07/18/01

Aroclor 1016	367	67.0	ug/kg	333		110	57-132			
Aroclor 1260	360	67.0	"	333		108	60-136			
Surr: 2,4,5,6-Tetrachloro-m-xylene	35.0		"	33.3		105	63-119			
Surr: Decachlorobiphenyl	41.0		"	33.3		123	52-131			

Matrix Spike (1071259-MS1)

Source: P1G0208-01

Prepared: 07/14/01 Analyzed: 07/18/01

Aroclor 1016	323	67.0	ug/kg dry	372	ND	86.8	57-132			
Aroclor 1260	359	67.0	"	372	ND	96.5	60-136			
Surr: 2,4,5,6-Tetrachloro-m-xylene	29.8		"	37.2		80.1	63-119			
Surr: Decachlorobiphenyl	40.0		"	37.2		108	52-131			

Matrix Spike Dup (1071259-MSD1)


Source: P1G0208-01

Prepared: 07/14/01 Analyzed: 07/18/01

Aroclor 1016	340	67.0	ug/kg dry	372	ND	91.4	57-132	5.13	50	
Aroclor 1260	370	67.0	"	372	ND	99.5	60-136	3.02	50	
Surr: 2,4,5,6-Tetrachloro-m-xylene	31.0		"	37.2		83.3	63-119			
Surr: Decachlorobiphenyl	40.5		"	37.2		109	52-131			

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Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter

Reported:
 07/31/01 12:36

Volatile Organic Compounds per EPA Method 8260B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1071301 - EPA 5035


Blank (1071301-BLK1)

Prepared & Analyzed: 07/16/01

Acetone	ND	25.0	ug/kg
Benzene	ND	1.00	"
Bromobenzene	ND	1.00	"
Bromochloromethane	ND	1.00	"
Bromodichloromethane	ND	1.00	"
Bromoform	ND	1.00	"
Bromomethane	ND	5.00	"
2-Butanone	ND	10.0	"
n-Butylbenzene	ND	5.00	"
sec-Butylbenzene	ND	1.00	"
tert-Butylbenzene	ND	1.00	"
Carbon disulfide	ND	10.0	"
Carbon tetrachloride	ND	1.00	"
Chlorobenzene	ND	1.00	"
Chloroethane	ND	1.00	"
Chloroform	ND	1.00	"
Chloromethane	ND	5.00	"
2-Chlorotoluene	ND	1.00	"
4-Chlorotoluene	ND	1.00	"
1,2-Dibromo-3-chloropropane	ND	5.00	"
Dibromochloromethane	ND	1.00	"
1,2-Dibromoethane	ND	1.00	"
Dibromomethane	ND	1.00	"
1,2-Dichlorobenzene	ND	1.00	"
1,3-Dichlorobenzene	ND	1.00	"
1,4-Dichlorobenzene	ND	1.00	"
Dichlorodifluoromethane	ND	5.00	"
1,1-Dichloroethane	ND	1.00	"
1,2-Dichloroethane	ND	1.00	"
1,1-Dichloroethene	ND	1.00	"
cis-1,2-Dichloroethene	ND	1.00	"
trans-1,2-Dichloroethene	ND	1.00	"
1,2-Dichloropropane	ND	1.00	"
1,3-Dichloropropane	ND	1.00	"
2,2-Dichloropropane	ND	1.00	"
1,1-Dichloropropene	ND	1.00	"

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Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter

Reported:
07/31/01 12:36

Volatile Organic Compounds per EPA Method 8260B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1071301 - EPA 5035


Blank (1071301-BLK1)

Prepared & Analyzed: 07/16/01

cis-1,3-Dichloropropene	ND	1.00	ug/kg							
trans-1,3-Dichloropropene	ND	1.00	"							
Ethylbenzene	ND	1.00	"							
Hexachlorobutadiene	ND	2.00	"							
2-Hexanone	ND	10.0	"							
Isopropylbenzene	ND	2.00	"							
p-Isopropyltoluene	ND	2.00	"							
4-Methyl-2-pentanone	ND	5.00	"							
Methyl tert-butyl ether	ND	1.00	"							
Methylene chloride	ND	5.00	"							
Naphthalene	ND	2.00	"							
n-Propylbenzene	ND	1.00	"							
Styrene	ND	1.00	"							
1,1,1,2-Tetrachloroethane	ND	1.00	"							
1,1,2,2-Tetrachloroethane	ND	1.00	"							
Tetrachloroethene	ND	1.00	"							
Toluene	ND	1.00	"							
1,2,3-Trichlorobenzene	ND	1.00	"							
1,2,4-Trichlorobenzene	ND	1.00	"							
1,1,1-Trichloroethane	ND	1.00	"							
1,1,2-Trichloroethane	ND	1.00	"							
Trichloroethene	ND	1.00	"							
Trichlorofluoromethane	ND	1.00	"							
1,2,3-Trichloropropane	ND	1.00	"							
1,2,4-Trimethylbenzene	ND	1.00	"							
1,3,5-Trimethylbenzene	ND	1.00	"							
Vinyl chloride	ND	1.00	"							
o-Xylene	ND	1.00	"							
m,p-Xylene	ND	2.00	"							
Surr: 4-BFB	19.6		"	20.0		98.0	70-130			
Surr: 1,2-DCA-d4	16.8		"	20.0		84.0	70-130			
Surr: Dibromofluoromethane	17.2		"	20.0		86.0	70-130			
Surr: Toluene-d8	19.2		"	20.0		96.0	70-130			

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North Creek Analytical, Inc.
Environmental Laboratory Network

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Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter

Reported:
 07/31/01 12:36

Volatile Organic Compounds per EPA Method 8260B - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1071301 - EPA 5035

LCS (1071301-BS1)

Prepared & Analyzed: 07/16/01

Benzene	20.4	1.00	ug/kg	20.0		102	80-135			
Chlorobenzene	19.9	1.00	"	20.0		99.5	80-135			
1,1-Dichloroethene	18.7	1.00	"	20.0		93.5	60-150			
Toluene	21.0	1.00	"	20.0		105	80-130			
Trichloroethene	20.1	1.00	"	20.0		100	70-135			
Surr: 4-BFB	20.5		"	20.0		102	70-130			
Surr: 1,2-DCA-d4	17.4		"	20.0		87.0	70-130			
Surr: Dibromofluoromethane	18.4		"	20.0		92.0	70-130			
Surr: Toluene-d8	18.9		"	20.0		94.5	70-130			

LCS Dup (1071301-BSD1)

Prepared & Analyzed: 07/16/01

Benzene	20.3	1.00	ug/kg	20.0		102	80-135	0.491	25	
Chlorobenzene	19.7	1.00	"	20.0		98.5	80-135	1.01	25	
1,1-Dichloroethene	18.8	1.00	"	20.0		94.0	60-150	0.533	25	
Toluene	20.7	1.00	"	20.0		104	80-130	1.44	25	
Trichloroethene	19.8	1.00	"	20.0		99.0	70-135	1.50	25	
Surr: 4-BFB	20.5		"	20.0		102	70-130			
Surr: 1,2-DCA-d4	17.3		"	20.0		86.5	70-130			
Surr: Dibromofluoromethane	18.5		"	20.0		92.5	70-130			
Surr: Toluene-d8	18.9		"	20.0		94.5	70-130			

Matrix Spike (1071301-MS1)


Source: P1G0208-01

Prepared & Analyzed: 07/16/01

Benzene	1810	83.7	ug/kg dry	1870	ND	96.8	60-135			
Chlorobenzene	1760	83.7	"	1870	ND	94.1	65-125			
1,1-Dichloroethene	1870	83.7	"	1870	ND	100	60-135			
Toluene	1870	83.7	"	1870	ND	100	60-125			
Trichloroethene	1730	83.7	"	1870	ND	92.5	60-125			
Surr: 4-BFB	19.5		"	18.7		104	70-130			
Surr: 1,2-DCA-d4	15.7		"	18.7		84.0	70-130			
Surr: Dibromofluoromethane	16.9		"	18.7		90.4	70-130			
Surr: Toluene-d8	17.9		"	18.7		95.7	70-130			

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 Environmental Laboratory Network

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Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter

Reported:
07/31/01 12:36

Volatile Organic Compounds per EPA Method 8260B - Quality Control

North Creek Analytical - Portland


Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1071301 - EPA 5035

Matrix Spike Dup (1071301-MSD1)		Source: P1G0208-01			Prepared & Analyzed: 07/16/01					
Benzene	1890	83.7	ug/kg dry	1870	ND	101	60-135	4.32	25	
Chlorobenzene	1830	83.7	"	1870	ND	97.9	65-125	3.90	25	
1,1-Dichloroethene	1950	83.7	"	1870	ND	104	60-135	4.19	25	
Toluene	1960	83.7	"	1870	ND	105	60-125	4.70	25	
Trichloroethene	1820	83.7	"	1870	ND	97.3	60-125	5.07	25	
Surr: 4-BFB	19.3		"	18.7		103	70-130			
Surr: 1,2-DCA-d4	15.5		"	18.7		82.9	70-130			
Surr: Dibromofluoromethane	16.7		"	18.7		89.3	70-130			
Surr: Toluene-d8	17.9		"	18.7		95.7	70-130			

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Environmental Laboratory Network

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Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter

Reported:
 07/31/01 12:36

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1071349 - EPA 3550

Blank (1071349-BLK1)

Prepared: 07/17/01 Analyzed: 07/19/01

Acenaphthene	ND	13.4	ug/kg							
Acenaphthylene	ND	13.4	"							
Anthracene	ND	13.4	"							
Benzo (a) anthracene	ND	13.4	"							
Benzo (a) pyrene	ND	13.4	"							
Benzo (b) fluoranthene	ND	13.4	"							
Benzo (ghi) perylene	ND	13.4	"							
Benzo (k) fluoranthene	ND	13.4	"							
Chrysene	ND	13.4	"							
Dibenzo (a,h) anthracene	ND	13.4	"							
Fluoranthene	ND	13.4	"							
Fluorene	ND	13.4	"							
Indeno (1,2,3-cd) pyrene	ND	13.4	"							
Naphthalene	ND	13.4	"							
Phenanthrene	ND	13.4	"							
Pyrene	ND	13.4	"							
Surr: Fluorene-d10	62.7		"	83.3		75.3	40-150			
Surr: Pyrene-d10	81.5		"	83.3		97.8	40-150			
Surr: Benzo (a) pyrene-d12	70.1		"	83.3		84.2	40-150			


LCS (1071349-BS1)

Prepared: 07/17/01 Analyzed: 07/19/01

Acenaphthene	130	13.4	ug/kg	167		77.8	33-139			
Benzo (a) pyrene	142	13.4	"	167		85.0	45-149			
Pyrene	139	13.4	"	167		83.2	39-138			
Surr: Fluorene-d10	65.2		"	83.3		78.3	40-150			
Surr: Pyrene-d10	84.7		"	83.3		102	40-150			
Surr: Benzo (a) pyrene-d12	75.2		"	83.3		90.3	40-150			

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 Environmental Laboratory Network

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Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter

Reported:
 07/31/01 12:36

Polynuclear Aromatic Compounds per EPA 8270M-SIM - Quality Control

North Creek Analytical - Portland


Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1071349 - EPA 3550

Matrix Spike (1071349-MS1)		Source: P1G0206-01		Prepared: 07/17/01		Analyzed: 07/19/01				
Acenaphthene	143	13.4	ug/kg dry	189	ND	75.7	33-139			
Benzo (a) pyrene	165	13.4	"	189	ND	87.3	45-149			
Pyrene	156	13.4	"	189	ND	82.5	39-138			
Surr: Fluorene-d10	139		"	94.4		147	40-150			A-01
Surr: Pyrene-d10	177		"	94.4		188	40-150			A-01
Surr: Benzo (a) pyrene-d12	164		"	94.3		174	40-150			A-01
Matrix Spike Dup (1071349-MSD1)		Source: P1G0206-01		Prepared: 07/17/01		Analyzed: 07/19/01				
Acenaphthene	126	13.4	ug/kg dry	189	ND	66.7	33-139	12.6	60	
Benzo (a) pyrene	166	13.4	"	189	ND	87.8	45-149	0.604	60	
Pyrene	156	13.4	"	189	ND	82.5	39-138	0.00	60	
Surr: Fluorene-d10	65.7		"	94.4		69.6	40-150			
Surr: Pyrene-d10	92.3		"	94.4		97.8	40-150			
Surr: Benzo (a) pyrene-d12	86.4		"	94.3		91.6	40-150			

North Creek Analytical - Portland

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32 of 34

Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Anne Krarawetter

Reported:
 07/31/01 12:36

Percent Dry Weight (Solids) per Standard Methods - Quality Control

North Creek Analytical - Portland


Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1071131 - Dry Weight

Duplicate (1071131-DUP1)		Source: P1G0120-01		Prepared: 07/11/01 Analyzed: 07/12/01						
% Solids	86.7	1.00 % by Weight			87.2			0.575	20	
Duplicate (1071131-DUP2)		Source: P1G0120-02		Prepared: 07/11/01 Analyzed: 07/12/01						
% Solids	77.5	1.00 % by Weight			74.5			3.95	20	
Duplicate (1071131-DUP3)		Source: P1G0120-03		Prepared: 07/11/01 Analyzed: 07/12/01						
% Solids	73.4	1.00 % by Weight			76.1			3.61	20	
Duplicate (1071131-DUP4)		Source: P1G0064-03		Prepared: 07/11/01 Analyzed: 07/12/01						
% Solids	98.6	1.00 % by Weight			98.9			0.304	20	
Duplicate (1071131-DUP5)		Source: P1G0064-04		Prepared: 07/11/01 Analyzed: 07/12/01						
% Solids	95.1	1.00 % by Weight			95.2			0.105	20	

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Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Anne Krarawetter


Reported:
07/31/01 12:36

Notes and Definitions

- A-01 Suspected double surrogate added during extraction.
- D-11 Detected hydrocarbons in the heavy/oil range appear to be due to overlap of diesel range hydrocarbons.
- Q-02 The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.
- Q-03 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte already present in the sample.
- Q-06 Analyses are not controlled on RPD values from sample concentrations less than 5 times the reporting limit.
- Q-14 The Spike Recovery and/or RPD is outside of control limits due to a non-homogeneous sample matrix.
- S-07 Surrogate recovery is out of control limits. QA criteria are met when one surrogate is within control limits.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
- wet Sample results reported on a wet weight basis (as received)
- RPD Relative Percent Difference

North Creek Analytical - Portland

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